**ROCKWELL HARDNESS TESTER** 





## SR10 AUTOMATIC HARDNESS TESTER



# **INTRODUCTION**

The GNEHM SR10 features a robust C-frame design, integrated with a load cell and a closed-loop force feedback system for precise test force application. Initiating a hardness test is effortless with a simple press of the START button on the 5" industrial touchscreen. Results are easily saved, with the capacity to store up to 50 readings.

This model supports both Rockwell and Brinell hardness tests, thanks to the versatility of the closed-loop system. Maintenance is straightforward, requiring only the removal of side and top covers for easy internal access, with no need to invert the machine.

## INNOVATION IN ROCKWELL HARDNESS TESTING

The GNEHM SR10 stands out in its class with its electronic load cell and closed-loop feedback system, ensuring flawless operation.

Its automatic test cycle applies the correct load and preset dwell time for error-free testing, making it a maintenance-free solution for accurate hardness measurements.

### **EXTENSIVE CAPABILITIES**

The GNEHM SR10 offers more workspace than most machines in its category, with a throat depth of 148mm and a maximum workpiece height of 240mm. Its rigid and durable build ensures it can handle even the toughest environments.

When compared to similar products, the GNEHM SR10 remains a top performer in its class.

# "RELIABLE DIGITAL ROCKWELL HARDNESS TESTING"



### **KEY FEATURES**

- Load cell, closed-loop force feedback system, with accuracy within 0.25% error margin
- Rockwell scales:
  A|B|C|D|E|F|G|H|K|L|M|P|R|S|V
- Brinell scales:
- HBW1/10 | HBW1/30 | HBW2.5/31.25 | HBW2.5/62.5 HBW2.5/187.5 | HBW5/25 | HBW5/62.5 | HBW5/125 HBW10/100
- 5" industrial touchscreen displaying scale readings, dwell time countdown, and more

- Convenient start/stop and menu navigation buttons
- Large internal memory to store up to 50 readings
- Throat depth: 148mm
- Working height: 240mm
- Machine weight (net): 104kg
- Dimensions: W245 x D560 x H760

### SR10 | SEMI-AUTOMATIC HARDNESS TESTER

### **USER-FRIENDLY SOFTWARE**

The software provides intuitive multi-function keys for testing, setup, storing, and uploading test programs, as well as statistics management, simplifying the testing process. Data can be exported either manually or automatically via USB to a PC for analysis in Excel.

The software includes advanced features like extended statistical analysis, shape corrections for convex, concave, or ball-shaped specimens, and hardness conversion between Rockwell, Brinell, or Tensile strength based on ASTM E140 and ISO 18625 standards with various material tables.

### "GO"



### "NO-GO"



Turn spindle down

### ADVANCED SOFTWARE FEATURES

# INDENTER COVER & WORKPIECE CLAMP

The GNEHM SR10 series comes standard with an indenter protection cover, featuring a built-in spring-loaded workpiece clamp that securely holds the workpiece against the anvil.

This design eliminates potential workpiece and spindle hysteresis, and the adjustable clamp force ensures no damage to the indenter occurs when testing softer materials.

# ROCKWELL TESTING PRECISION



## **SR10** | SPECIFICATIONS

Tester model	SR10
Load system	
Test load range	10kgf - 187,5kgf (Regular Rockwell scales)
Load steps	9
Loads in kgf	Preload : 10kgf main loads : 25   30   31.25   60   62.5   100   125   150   187.5kgf
Load application system	Electronic   Closed Loop
Force control	Load Cell Transducer
Load operation sequence	Automatic - (Manual pre-load) Load Dwell Unload  (auto start at reaching Pre Load)
Load application speed	Compliant to applicable standards
Load dwell time	1-999 seconds
Parameters & settings	
Rockwell scales	A   B   C   D   E   F   G   H   K   L   M   P   R   S   V
Brinell scales	HB(W)1/30   HB(W)2.5/31.25   HB(W)2.5/62.5   HB(W)2.5/187.5   HB(W)5/25 HB(W)5/62.5   HB(W)5/125   HB(W)10/100
Conversion to other methods	All hardness scale conversions compliant to ISO & ASTM
Cylindrical and spherical	Offset for both available via touch panel
Go/No Go	Settings via touch panel
Electronics system	
Screen	Full colour screen 5"   Portrait mode   Touchscreen   Buttons
Integrated controller	High performance industrial electronics
Connectivity	USB-2 rear connection
Storage	Memory for 999 readings / external via USB stick
Display information	Scale, test load setting, test result (hardness value), Go-No go settings (limits), results list, output channe load progress indicator, dwelltime, light source on / off, results list selection, limit settings, conversion scales, start/stop button, calibration menu access.
Self diagnosis	Motors, switches, power supplies
Machine settings	Last settings memory
-	

Compliance	
Measuring system & operation	Comform to EN I
Certification	Factory calibration certificate
Electronic system	Meeting general glo
General data	
General data Electric connectivity	Single pho
	Single pho Workpiece height Max 24
Electric connectivity	



# A Swiss premium brand

### I ISO 6508 | ASTM E18 | JIS B-7726

e or ISO 17025 accredited ILAC-MRA certificate

obal safety & European CE standards

hase AC100~240V 50/60Hz

40mm | Depth from spindle middle 148mm

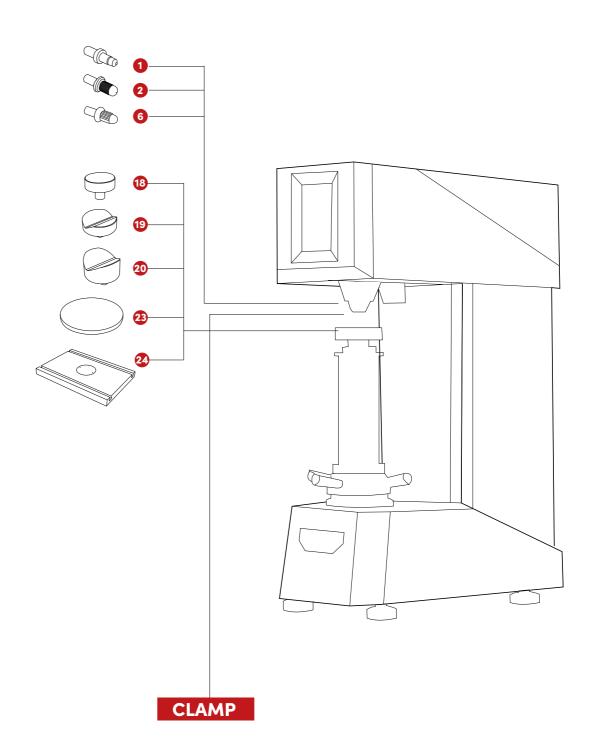
√245 x D560 x H760

104kg

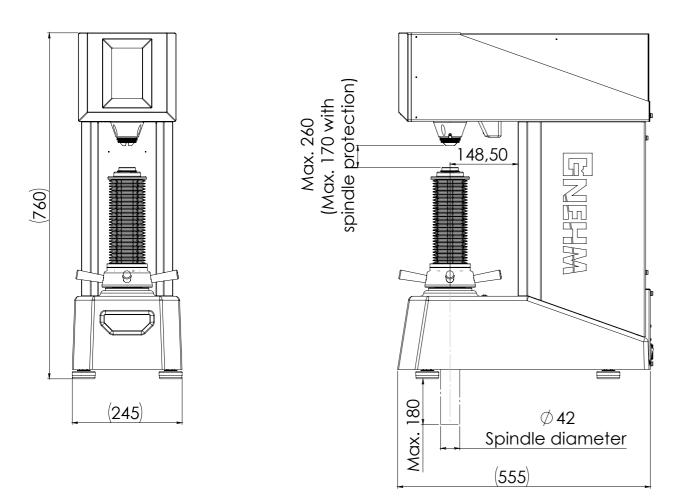
# SR10 | ACCESSORIES

SR10	) STANDARD ACCE	SSORIES
1	100.SR1020.ACC	IND-RC635 Rockwell diamond Indenter, 6,35mm
		IND-RB635   Rockwell ball indenter, 1/16", 6.35mm
		HTB-HRC60   Test block +/- 60HRC
		HTB-HRC25   Test block +/- 25HRC
18		140.AV.105   Flat Anvil 60mm
19		140.AV.110   V-anvil 63mm
		PWCBL1   Powercable EU / Powercable US
		SERVTLS2   Service Tools set
		ACCBOX3   Accesories packing Box
		SR10-INSMANENG   English Instruction Manual, USB stick
		900.PB.20   Standard packing box for air/seafreight

2 1	ND-RC635IA	Rockwell C Diamond Indenter, Ø6.35mm, ISO & ASTM certified
-	ND-RB116635IA	Rockwell Ball Indenter 1/16". Incl. 1 carbide ball. Ø6.35mm. ISO & ASTM certified
	ND-RB18635IA	Rockwell Ball Indenter 1/8". Incl. 1 carbide ball. Ø6.35mm. ISO & ASTM certified
	ND-RB14635IA	Rockwell Ball Indenter 1/4". Incl. 1 carbide ball. Ø6.35mm. ISO & ASTM certified
	ND-RB12635IA	Rockwell Ball Indenter 1/2". Incl.1 carbide ball, Ø6.35mm. ISO & ASTM certified
	ND-B6351IA	Brinell Indenter 1mm. Includes 1 carbide ball. Ø6.35mm. ISO & ASTM certified
	ND-B63525IA	Brinell Indenter 2.5mm. Includes 1 carbide ball. Ø6.35mm. ISO & ASTM certified
8 1	ND-B6355IA	Brinell Indenter 5mm. Includes 1 carbide ball. Ø6.35mm. ISO & ASTM certified
9 1	ND-B63510IA	Brinell Indenter 10mm. Includes 1 carbide ball. Ø6.35mm. ISO & ASTM certified
10 R	U-CB116IA	1/16" carbide ball. ISO & ASTM certified
	U-CB118IA	1/8" carbide ball. ISO & ASTM certified
12 R	U-CB114IA	1/4" carbide ball. ISO & ASTM certified
13 R	PU-CB112IA	1/2" carbide ball. ISO & ASTM certified
14 R	U-CB1IA	1.0mm carbide ball, only for ø6.35mm. ISO & ASTM certified
15 R	U-CB25IA	2.5mm carbide ball, only for ø6.35mm. ISO & ASTM certified
16 R	U-CB5IA	5.0mm carbide ball, only for ø6.35mm. ISO & ASTM certified
10 R	U-CB10IA	10.0mm carbide ball, only for ø6.35mm. ISO & ASTM certified
18 1	40.AV.105	Flat anvil 60mm
19 1	40.AV.110	V-anvil 63mm
20 1	40.AV.130	V-anvil ø40mm 6-60mm
21 1	40.AV.132	V-anvil ø63mm 10-100mm
22 1	40.AV.124	V-Anvil ø80mm 3.3-20mm
23 1	50.TT.105	Rond Testing table 180mm, hardened Stainless steel, spindle fix
24 1	50.TT.150	Large test table 350x250mm
	50.MF.104	Mounting flange for large test table



### **SR10** | MECHANICAL DRAWINGS



All dimensions in these drawings are approximate and in millimeters. Working heights and workpiece accommodation may vary based on the stages and accessories used.

For more details, please contact our sales department.



### Catalogue SR10 V1.4

Product specifications may evolve with new technologies and ongoing development.

We reserve the right to update or modify product specifications without prior notice. For the most current information, please contact our sales office.

### **GLOBAL SALES**

**GNEHM International LLC-FZ** Grandstand, 6th floor Meydan Road, Nad Al Sheba Dubai | UAE

+971 50 491 2588 info@gnehm-testing.com www.gnehm-testing.com

### SWITZERLAND (CH + FL) & AUSTRIA

**GNEHM Härteprüfer AG** Bönirainstrasse 13 8800 Thalwil Schweiz

+41 (0) 44 725 43 42 admin@gnehm-haertepreufer.ch www.gnehm-testing.com

### DEALER